Progress Report

STRENGTHENING PRIMARY care IN NOVA SCOTIA COMMUNITIES

new health care

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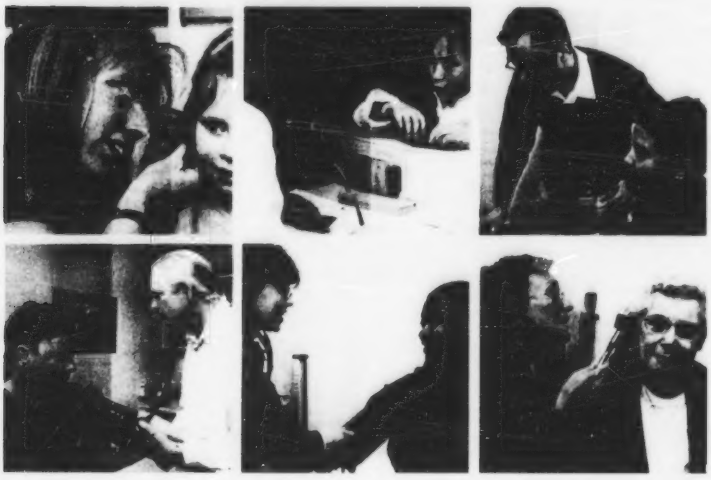
PRIMARY Care



Progress Report

March 30, 2001

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NOVA SCOTIA
Department of Health

This project was supported by a financial contribution from the Health Transition Fund, Health Canada.

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Preface

STRENGTHENING PRIMARY care IN NOVA SCOTIA COMMUNITIES

This document outlines the progress toward the implementation objectives of the Strengthening Primary Care Initiative. It focuses on the administrative aspects of the initiative, describing achievements and lessons learned to date from the planning and implementation phases of the project. It lays the foundation for the final report on the findings of the project evaluation. The province of Nova Scotia has committed to continue to support this initiative until December 31, 2002. Final evaluation results will be reported in March 2003.

The Nova Scotia Department of Health acknowledges the contributions of the steering committee and working group members, and specifically the providers, staff, governing bodies and patients/clients of the four demonstration sites and the comparison site.

STRENGTHENING
PRIMARY Care
IN NOVA SCOTIA COMMUNITIES

Many elements of Nova Scotia's health system serve its population well, and these elements need to be protected. However, if Nova Scotia's health system is to be effective in addressing changing health needs into the next century, improvements are necessary. Nova Scotians have spoken clearly about the need to strengthen the primary care system. Through the Strengthening Primary Care in Nova Scotia Initiative, the Nova Scotia Department of Health is supporting primary care providers and communities who want to try new ways of delivering primary care services and build on the strengths, innovation, and leadership that exist within those communities.

Although Health Transition Fund funding ends on March 31, 2001, the Nova Scotia Department of Health has committed the necessary financial resources for the initiative to operate until December 31, 2002. As a result, this report outlines the progress of the Strengthening Primary Care Initiative to date. It identifies the achievements and lessons learned from the planning and implementation phases of the project.

The initiative is guided by a provincial Primary Care Steering Committee made up of representatives from medical, nursing, and allied health professions, former regional health boards, tertiary care facilities, community health boards, and community health centres. Working groups on Evaluation, Information Systems, and Funding Formulae and Policy support the steering committee and the activities of the initiative.

Prior to implementation of the initiative, the steering committee defined its goals and objectives based on a series of public and professional consultations. The College of Physicians and Surgeons of Nova Scotia and the Registered Nurses Association of Nova Scotia developed guidelines for nurse practitioners in primary care demonstration projects.

Since site selection in November 1999, the initiative has seen the establishment of demonstration sites in the communities of Caledonia (Queens County), Pictou West, Springhill, and Halifax. Each site was required to:

- hire a nurse practitioner to practise collaboratively with one or more family physicians and other members of an interdisciplinary primary care team;
- adopt alternative payment mechanisms for primary care physicians;
- adopt and use computerized information systems to support primary care service delivery;
- participate in evaluating the initiative.

The Strengthening Primary Care Initiative is only in its early operational days. Despite numerous challenges during planning and implementation, the people involved in the initiative have experienced great achievements.

Each of the sites has hired a nurse practitioner and developed and received approval on their collaborative practice agreement. The Nova Scotia Pharmacy Act and Regulations have been amended to allow pharmacists to fill prescriptions written by nurse practitioners, and several operational issues related to the introduction of nurse practitioners in the primary care setting have been resolved.

Information system hardware and software has been installed, and staff at the demonstration sites have received training. Steady progress has been made with the clinical management system. The conversion of patient charts from paper to electronic patient records is under way at each of the sites. Practice management software is being used not only to handle patient appointments, but also to track all activities performed by the providers: team meetings, community work, and project-related activities. A helpdesk has been established to provide system support to users at the sites and an automated lab interface is being tested.

A comprehensive evaluation framework based on HTF goals, the goals and objectives of the initiative, and evidence-based research has been developed. Project staff have developed a policy on data ownership and publication and standards related to patient population identification. Where existing evaluation tools were not available, they were developed. Protocols for ethics review of the evaluation methods were developed, and received approval from the Dalhousie University Health Sciences Human Research Ethics Board. All pre-implementation methods are complete or are nearing completion.

After completion of the initiative in December 2002, the final evaluation will identify a number of key findings that will inform policy well into the future.

However, some lessons have already been learned.

- *Many aspects of primary care renewal that are beyond the scope of this initiative should be considered in the future. One example is the role of other allied health providers in delivering primary health care.*
- *The magnitude of change that such an initiative requires of care providers, administrators, governing bodies and patients/clients should not be underestimated.*
- *Managing this type of change is critical. It requires ongoing planning and commitment by a wide range of champions, including communities, providers, stakeholders and government.*
- *Primary care organizations and their communities require support to build on existing strengths and increase their capacity to implement new ways of organizing, delivering, and funding primary care services.*
- *Three years is not enough time for a primary care demonstration project to be implemented and effectively evaluated.*
- *A longer transition period between pre-implementation and implementation would have benefited the demonstration sites.*
- *Changes to the way primary care is delivered should be made gradually, to allow providers to continue to provide care while changing the way they deliver that care.*
- *It is extremely important to include all relevant stakeholders in the initiative at the planning and development phase.*

- *Consultation and stakeholder involvement, including the establishment of a provincial steering committee body and working groups, was invaluable to the planning and implementation of the initiative.*
- *A high degree of commitment at the department, stakeholder, and demonstration site level is required to successfully introduce a new provider to the primary care setting.*
- *User acceptance and use of new information systems depends on their level of preparedness to change, recognition of the benefits of using such a system, and the ability to set reasonable goals related to system use.*
- *Clearly defined program goals and objectives, from which the evaluation flows, are critical. These goals and objectives must be prioritized so that the evaluation resources can be tailored to the identified priorities.*
- *Communication is key to successfully supporting the demonstration sites and will be a critical success factor in supporting future primary care demonstration initiatives.*
- ***Leaders and champions at all levels are critical to the success of primary care renewal initiatives.***

This initiative will continue to inform policy throughout its duration as site staff and providers, community champions, the Department of Health, and other stakeholders continue to work together to forge new ground in the attempt to identify new and exciting ways to improve primary care service delivery in Nova Scotia.

Introduction

STRENGTHENING PRIMARY care IN NOVA SCOTIA COMMUNITIES

In response to a recommendation of the National Forum on Health, in 1997, the Health Transition Fund (HTF) was created to generate evidence about what works and what does not work in terms of models and approaches to four priority areas of health care. These included home care, pharmacare, primary care, and integrated service delivery.

The Nova Scotia Department of Health committed most of its per capita allocation of HTF funds to evaluating new ways of delivering, managing, and funding primary care services. In April 1998, $2.85 million was allocated for a primary care demonstration project called Strengthening Primary Care in Nova Scotia. This initiative officially launched four demonstration sites on January 1, 2000.

Although HTF funding ends on March 31, 2001, the Nova Scotia Department of Health has committed the necessary funding for the initiative to operate until December 31, 2002. As a result, this is a progress report upon which the initiative's final results and final report will be built.

Purpose

Through the demonstration sites, the Nova Scotia Department of Health intends to support primary care providers and communities who want to try new ways of delivering primary care services and build on the strengths, innovation and leadership that exist within those communities.

Goals

The goals of the initiative are:

To improve patient/client centered primary care
The individual, family and community should be central to primary care.

To improve responsiveness of primary care organizations/groups to community needs
Primary care organizations/groups should be responsible for ensuring they are in touch with and responsive to their communities.

To improve access to comprehensive primary care services
Comprehensive primary care services should be available to all Nova Scotians.

To increase emphasis on health promotion and illness prevention
Primary care organizations/groups should promote health and prevent illness through education, services and advocacy.

To improve collaboration
Primary care providers should work collaboratively with patients/clients, each other, and with other health professionals and programs throughout Nova Scotia.

To improve accountability
Primary care services should be provided within a framework that defines specific areas of responsibility and accountability for patients/clients, families and communities, providers, primary care organizations, community and former regional health boards, and the Nova Scotia Department of Health. These accountabilities should be jointly developed and supported by appropriate infrastructures.

The objectives of the initiative can be found at the end of this report.

Description of the Initiative

This initiative has involved the establishment of four demonstration sites in communities throughout Nova Scotia. The intent of the initiative is to have the demonstration sites implement changes in the way that primary care is traditionally delivered and to evaluate these changes. While each site may also have made changes to its governance, service delivery, and operational structures based on the needs of its community, each was required to adopt the following three implementation strategies:

Hire a nurse practitioner to practise collaboratively with one or more family physicians and other members of an interdisciplinary primary care team.

Adopt alternative payment mechanisms for primary care physicians.

Adopt and use computerized information systems to support primary care service delivery.

A provincial steering committee guided the development of the initiative. Its members represented the following bodies:

- medical, nursing, and allied health professions
- former regional health boards
- tertiary care facilities
- community health boards
- community health centres

While the steering committee's involvement in the initiative has lessened since site selection, it continues to monitor the progress of the initiative (see Terms of Reference in Appendix 1). Three working groups, Evaluation, Information Systems, and Funding Formulae and Policy have supported the steering committee and the activities of the initiative.

Relevance

Many elements of Nova Scotia's health system serve its population well, and these elements need to be protected. In Nova Scotia, publicly insured health care is available to all residents. A provincial emergency transport system coordinates the dispatch of ground and air ambulances and trained personnel. An insurance program provides drugs to seniors and to people receiving social assistance. Publicly funded programs and services such as home care, addiction services, public health, and mental health are available across the province. Nova Scotia also has many dedicated health care professionals, including family physicians, who support these programs and provide excellent service.

However, if Nova Scotia's health system is to be effective in addressing changing health needs into the next century, improvements are necessary. Primary care needs to be strengthened because most problems that contribute to the dissatisfaction of those who provide health care and those who receive it, are related to the way we deliver primary care. Problems with access to primary care services, which have been well documented include:

- attracting and keeping family physicians and other health care providers in some parts of the province;
- coordination of services;
- collaboration among health care professionals;
- the way we pay for primary care services.

Nova Scotians have spoken clearly about the need to strengthen the primary care system through the Royal Commission on Health Care, the Nova Scotia Task Force on Primary Health Care, and the Provincial Health Council. Their concerns have been echoed across Canada in the National Forum on Health and the National Consultation on Primary Care organized by the Federal/Provincial/Territorial Advisory Committee on Health Services. This initiative will pave the way for further renewal of Nova Scotia's primary care system.

PRIMARY**Care**

Pre-implementation

During the early planning days of the initiative, the Department of Health felt that it was critical to involve stakeholders. Key partners were selected to provide leadership through a provincial steering committee, which was chaired by the Director of Primary Care of the Nova Scotia Department of Health.

The mandate of the steering committee is to provide the ongoing policy and practical advice for the development, implementation, and evaluation of the initiative. Working groups to support the alternative funding, information systems, and evaluation were then developed with representation from the various stakeholder groups.

Meeting your ***health care*** *needs in* ***new***

This section of the report describes those achievements that were realized prior to implementation. The associated challenges that were encountered throughout this period are also discussed.

Definition, Goals, and Objectives

In the fall of 1998, the department held a series of stakeholder consultations to obtain input from professionals and communities about new ways to fund, deliver and manage primary care in Nova Scotia. A draft discussion document developed by an inter-branch Primary Care Working Group was used to generate feedback from these stakeholders on draft principles for primary care. Based on this feedback, the steering committee developed a definition of primary care, the goals and objectives for the initiative, and the criteria for selecting and evaluating the demonstration sites. A background document was developed to share this information with stakeholders and potential demonstration site communities.

Policy and Planning Support

In addition to defining the goals and objectives, the steering committee, working groups, and project staff conducted significant work to develop and approve a draft evaluation framework and identify information systems requirements. Other examples of support provided by project staff include literature reviews, policy research, preparation of discussion documents and ministerial briefings, visual presentations, speeches, consultation processes, development of proposal evaluation criteria and assessment tools, and development and monitoring of work plans and time-lines.

Nurse Practitioner Scope of Practice Guidelines

In the absence of legislation permitting nurse practitioners to practise in Nova Scotia, a mechanism was needed to enable them to practise within the context of the initiative. The College of Physicians and Surgeons of Nova Scotia (CPSNS) and the Registered Nurses Association of Nova Scotia (RNANS), are the regulatory bodies governing scope of practice in Nova Scotia. These two bodies, with input from the project's physician and nurse practitioner consultants, developed "Guidelines for Nurse Practitioners in Collaborative Practice in Primary Care Demonstration Projects" (see Appendix 2). The guidelines require the development of a collaborative practice agreement between the nurse practitioner and physician(s) at each demonstration site, which must be approved by the regulating bodies.

Site Selection

The selection of the demonstration sites was a two-step process. First, a Call for Letters of Intent was issued to primary care providers and communities interested in becoming demonstration sites. Seventeen Letters of Intent were received, and eight proponents were invited to develop proposals. With input from the three working groups, the steering committee evaluated the proposals against the goals and objectives of the initiative and named the following four communities/ organizations as demonstration sites:

- North Queens Community Health Centre in Caledonia, Queens County;
- The North End Community Health Centre in Halifax;
- The Springhill & Area Healthy Community Society in Springhill;
- The Healthy Pictou West in Pictou West.

Policy and Standards

In the absence of legislation regarding the privacy of personal health information in Nova Scotia, project staff and the Information Systems Working Group explored options that would protect the personal health information of patients/clients. Procedures have been implemented at each site.

Challenges of Pre-implementation

The initiative was and still is committed to consultation. Consultation was beneficial in informing and enriching the planning process, and in gaining the support of stakeholders during the development phase. However, consultation takes considerable time, and it resulted in some delays.

The decision to include nurse practitioners in each demonstration site also presented challenges. It had always been the intention of the department to introduce nurse practitioners as a component of the initiative. However, when raised at the steering committee, it became apparent that not all members understood it to be a mandatory component. Because the steering committee members could not come to a consensus on this issue, and based on a commitment to the Registered Nurses Association of Nova Scotia, the Minister of Health decided that all four demonstration sites would include a nurse practitioner.

Implementation

In its first year, the initiative has seen the establishment of two new primary care organizations and changes made to two existing primary care organizations. This could not have taken place without the hard work and dedication of numerous individuals in the communities, demonstration sites, the Department of Health, and stakeholders. The success of the initiative is due to the coordination and execution of an enormous number of related activities and the achievement of numerous milestones.

This section of the report will describe the activities that have taken place, the milestones that have been achieved, and the challenges faced in the initiative's first year.

Nurse Practitioners and Collaboration

This component of the project involves introducing a new primary care provider, the nurse practitioner, and the way primary care is practised among inter-disciplinary team members at the demonstration sites. This implementation strategy is supported by a team consisting of the nurse practitioner consultant,

physician consultant, senior policy analyst, and the project manager. A number of achievements related to this component have been realized to date.

Hiring of nurse practitioners
At the request of the demonstration sites, project staff developed a job description and centralized advertisement for the nurse practitioner positions. Project staff led the initial screening process with assistance from RNANS, who determined the criteria for licensing for the nurse practitioners involved in the initiative. Sites then conducted interviews and each site had hired a nurse practitioner by the fall of 2000.

Collaborative Practice Agreements
The formal collaborative practice agreement between physicians and nurse practitioners is a new concept in Nova Scotia. Collaborative practice teams at the four sites have developed and received approval for their collaborative practice agreements.

Amendments to Pharmacy Act and Regulations
Although the guidelines permit nurse practitioners to prescribe certain medications, the Pharmacy Act had to be amended in order to allow pharmacists to fill prescriptions written by nurse practitioners. This amendment, made in November 1999, required the involvement of project staff, legal counsel, the Nova Scotia Pharmaceutical Society, the CPSNS, the RNANS, and the Pharmacy Association of Nova Scotia. In November 2000, the regulations were amended to include the list of drugs that the nurse practitioners can prescribe.

Other achievements related to the nurse practitioner and collaboration include the following:

- A one-day orientation session was held for collaborative practice teams of the four sites.
- Project staff, with input from providers at the sites, have developed a continuing education plan for collaborative practice teams.
- Several operational issues related to the introduction of nurse practitioners in the primary care setting have been identified and resolved with the input of project staff, internal and external stakeholders, and other jurisdictions.

Challenges
The introduction of nurse practitioners in the primary care setting is a groundbreaking experience for Nova Scotia. While this no doubt lends excitement and a high profile to the initiative, it is at the same time a challenge. Despite the guidelines developed by the CPSNS and RNANS, it was impossible to foresee every operational situation that the collaborative practice team would face. As a result, project and demonstration site staff have worked together to identify those issues that the guidelines do not specifically address. Resolving these issues is critical. The resulting lessons learned will inform policy related to nurse practitioners in the broader Nova Scotia health care system.

To date, challenges related to the collaborative practice teams have included:

- The difficulty of recruiting nurse practitioners to the three rural positions increased the length of time it took to staff these positions.
- Decisions that related to who would employ the nurse practitioners were complicated by several issues, for example, employment status, union, and liability. As a result, the primary care organizations that were not

already registered as a society or corporation became incorporated for the purpose of employing the nurse practitioner.

- The lengthy process required to amend the Pharmacy Act and Regulations meant that nurse practitioners could not prescribe drugs (that is, practise to their full scope) until the end of November 2000. As well, the length of time it took to approve the amendments to the regulations resulted the list of drugs being out of date.
- With respect to the various operational issues that arose, in some cases it was challenging to find effective solutions in a timely manner. In other cases, the involvement of other parties was required, or the complexities of the issue were outside of the scope of the initiative, making the desired resolution unattainable.

The collaborative practice teams at the four demonstration sites are well established in each of the four communities. This component of the initiative has received positive interest and media coverage across the province.

Information Systems

The Information Systems Working Group (ISWG) supported the information systems component of the initiative. Its mandate was to coordinate and advise upon the information system and supports needed to ensure that the initiative could be successfully implemented and evaluated (see Terms of Reference in Appendix 3). It included representation from the Medical Society of Nova Scotia, Dalhousie Family Medicine, the Registered Nurses Association of Nova Scotia, Maritime Medical Care, the Department of Health, and the demonstration sites.

In order to minimize the potential challenges associated with each demonstration site having a different information systems vendor, it was decided that only one vendor would be selected to implement its system in all four sites.

Key milestones and achievements related to the information system component include:

Vendor Selection
Project staff and the ISWG developed a comprehensive list of requirements for an integrated electronic patient record and practice management system. Five vendors submitted proposals, which were evaluated against a rigorous five-tier process. The tender was awarded to a joint proposal from two vendors.

System Installation and Training
System hardware and software have been successfully installed in all four demonstration sites, and staff from each site have received hands-on training in system administration, practice management, and the electronic patient record software.

Nurse Practitioner Shadow Billing
Nurse practitioners are new providers in Nova Scotia, and shadow billing (the capturing and reporting of patient encounter information) of their clinical activities is required as part of the initiative's evaluation. In order to shadow bill, nurse practitioners had to be registered as a new category of providers and the province's medical services billing system had to be adapted. Nurse practitioner shadow billing is under development at this time.

Practice Management System
This has been the most successfully implemented component of the information system to date. It not only handles patient appointments, but also enables the sites to track all activities performed by the providers. For the first time, it will be possible to accurately reflect the full range of activities that are important in the delivery of primary care.

Clinical Management System
Steady progress has been made with the clinical management system. Providers at each of the demonstration sites are documenting patient encounters in the electronic patient record. Custom processes for converting patient/client paper charts into electronic records are being developed at each site. Additional software programming has been conducted to incorporate "alerts" (automatic electronic reminders) in the patient record for selected preventive health indicators.

Other achievements include:

- The establishment of a helpdesk that gives the sites a seamless method of obtaining system support through a single point of contact with the vendors.
- The continuing provision of software training to site staff and providers.
- The planned testing of an automated lab interface.
- The availability of Internet access at the demonstration sites.

Challenges
The requirement to gather data electronically for the evaluation, and the ambitious timeline for putting the information systems in place, have posed the largest challenges to this component of the initiative. This is the first time this kind of advanced information system has been implemented in the primary care setting in Nova Scotia. Other challenges related to information systems include:

- Licensing obligations and the development of the vendor contract were complicated by the diverse locations of the vendor and the four demonstration sites.
- Defining the data to be included in chart conversion proved to be challenging.
- The provision of relevant and timely training and support to users at the four sites within the parameters of the vendor contract was difficult. The lack of experience with computers and electronic patient records may mean that users will need more training throughout the initiative.

Despite these challenges, the information system component of the initiative has been extremely successful. In a little over one year, four unique primary care demonstration sites have adopted and are using advanced information systems that include an electronic patient record and a practice management system that are completely new to both providers and staff.

Alternative Funding

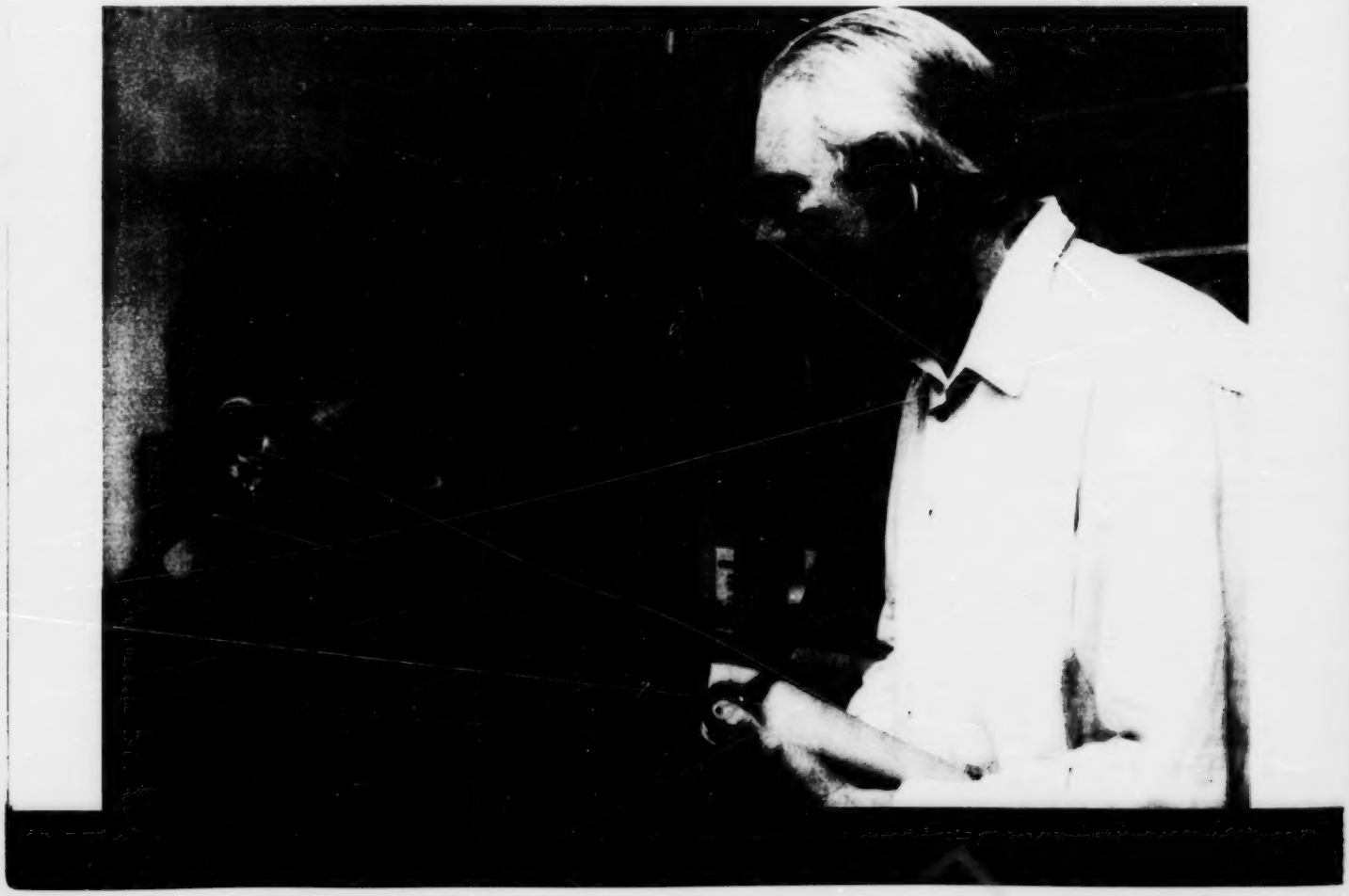
The alternative funding component of the initiative was supported by the Funding Formulae and Policy Working Group (FWG). Its mandate was to outline the funding options for physician services available to the demonstration sites and to articulate accountability relationships from a funding perspective (see Appendix 4). The working group was made up of representatives of the Department of Health, former regional health boards, the Medical Society, and RNANS. Its work was complete before the demonstration sites were selected. It undertook the following activities:

Research
Several forms of funding models and alternative physician payment were researched. The working group decided that block funding or population-based funding would be available to demonstration sites. None of the demonstration sites opted for the population-based method of funding.

Site Visits
Site visits were conducted to help proponents select and develop their funding models. In some cases, physicians wanted to know more about what their pay would look like under each of the funding options. The Department of Health conducted the analysis and provided the information to those physicians.

Physician Alternative Payment Agreements
Physicians in all but one of the selected sites already had alternative payment contracts with the Department of Health. In these cases, the existing payment contracts were continued. Department staff worked with the physician at the remaining site to develop the required payment contract.

The fact that none of the selected sites opted for the population-based method of funding has eliminated the potential challenges associated with administering this method of funding while at the same time introducing new providers and information systems. However, it also means the feasibility of the the capitation and blended-capitation models in Nova Scotia's primary care system will not be evaluated in this initiative.



Evaluation

The evaluation component of the initiative is being guided by the Evaluation Working Group (EWG). The group has representation from the Nova Scotia Pharmaceutical Society, Dalhousie University, former regional health boards, RNANS, the Medical Society, Department of Health, Eskasoni HTF project, and the demonstration sites. Its mandate is to oversee the development, implementation, monitoring, and dissemination (reporting and communication) of an evaluation plan for the initiative (see the working group's terms of reference in Appendix 5). Through partnerships with Dalhousie University's Department of Family Medicine and School of Health Services Administration, the initiative gained the services of arm's-length evaluators who were instrumental in the early stages of development of the evaluation.

Following clarification of the initiative's goals and implementation strategies, a program logic model, which frames the planned changes and the expected outcomes, was developed (see Appendix 6). The logic model visually depicts the relationship between the implementation strategies and implementation objectives, outputs, initial and intermediate outcomes, and long-term outcomes or impacts. The logic model also provides a visual framework for the evaluation plan.

Development of the Evaluation Framework
Project staff, members of the EWG, and site representatives, with input from the steering committee and other working groups, developed an evaluation framework that was accepted by all stakeholders. The framework was developed based on HTF goals, the goals and objectives of the initiative, and evidence-based research, and it reflects demonstration site needs. It describes the qualitative and quantitative methods of data collection for both the process and impact evaluation components.

The framework and its supporting documents articulate the evaluation questions and identify the indicators, measures, data elements, data linkages, methods, design, and statistical analysis that will be used to answer the questions. Since its original development, the framework has been further adapted to reflect the needs of the sites and the ability to collect data. The framework and individual evaluation components have been requested and shared with other jurisdictions and organizations across Canada. The complete evaluation framework can be found in Appendix 7.

Policy and Standards
A standard method of identifying patient population at the demonstration sites and the comparison site was developed. The defined populations were then used for the pre-implementation patient surveys and to populate the new information systems at the demonstration sites. A policy covering data and information ownership and publication was developed. The policy both encourages further research and evaluation and protects first publication rights and ownership (see Data Ownership and Publication Policy in Appendix 8).

Evaluation Methods Achievements
The evaluation incorporates 11 methods, including focus groups, patient survey, site interviews, site observation, key informant interviews, chart audit, database development and analysis (including preventative health indicators and data linkages), exit interviews, media scan, economic evaluation, and file reviews and discussions. Where valid tools and measures were not available, they were developed. Key informant interviews, focus groups, site interviews and site observations were designed to include feedback from participants.

Prior to commencing data collection, protocols for ethics review of the evaluation methods were developed and submitted for approval from the Dalhousie University Health Sciences Human Research Ethics Board. Other achievements related to the evaluation to date include:

- Vendors were selected to conduct the patient survey, focus groups, chart audit and evaluation database.
- All pre-implementation focus groups have been successfully completed.*
- Baseline key informant interviews are being conducted.*
- All baseline site interviews have been completed.*
- Baseline observations of each of the four sites are complete.*
- Chart audit checklists have been developed for the two conditions that will be audited.
- The patient consent process for the evaluation database is under way at the four demonstration sites, and the required data elements (including preventative health indicators) for the database have been identified.
- The pre-implementation patient surveys have been completed.*
- Two of the three types of exit interviews have been piloted.
- An ongoing scan of media coverage related to the health care system and the initiative is being conducted.
- A literature review is being prepared to assess the data sources available for the economic evaluation.

* *Report writing is under way.*

A matched comparison practice site in Nova Scotia was identified and has agreed to participate in the patient survey and database components of the evaluation.

Challenges

The evaluation is tremendously large and complex and it has required more resources than have been consistently available. This has resulted in reallocating workload to fewer staff and allocating responsibility for leading the evaluation to the project manager during implementation. As a result, delays related to report writing and the development of two methods have been experienced. The response rate to the patient survey pilot required a change in data collection method. This resulted in difficulties related to conducting it within the pre-implementation timeframe.

The ethics review process was also significant. The ethics board's membership, procedures, and guidelines changed in the midst of its review of the initiative. This necessitated additional effort by evaluation project staff, and created tremendous pressure related to commencing pre-implementation data collection within the planned timeframe.

Despite these many challenges, the evaluation framework has been developed. It successfully defines the project's goals in measurable terms. Each of the evaluation methodologies received ethics approval without delaying pre-implementation data collection, and all pre-implementation methods are either complete or near completion.

Project Management and Administration

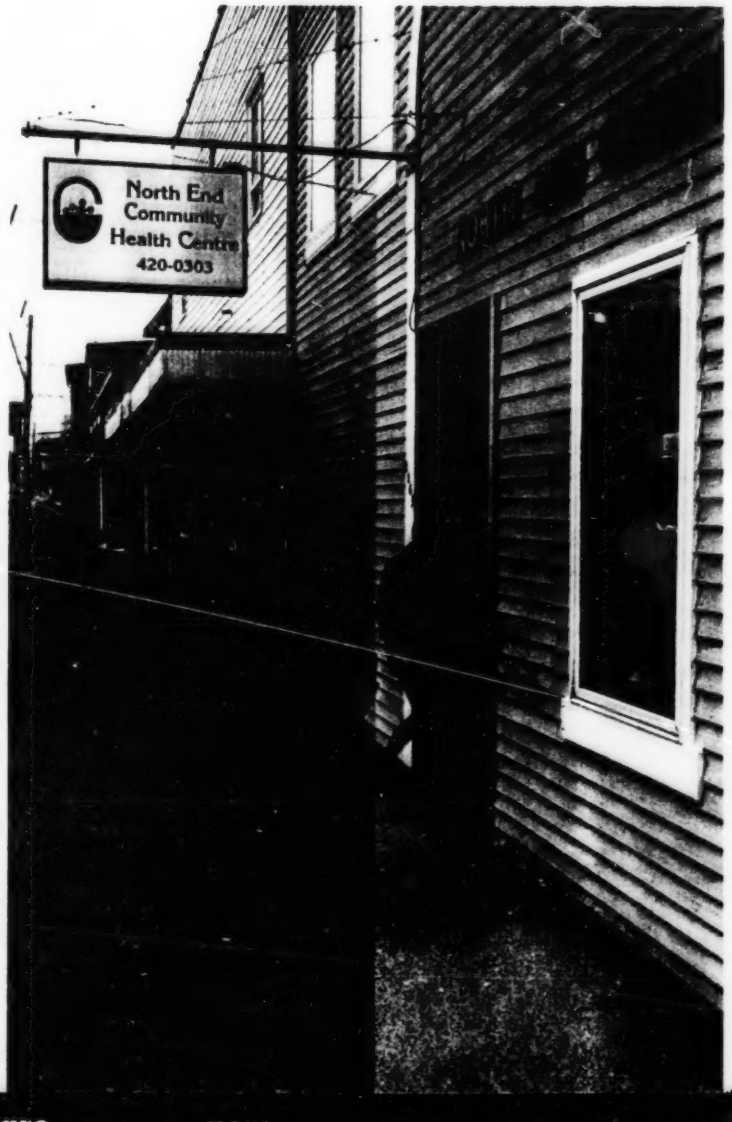
The initiative is broader than the three implementation strategies and the evaluation. A very large component of work is related to project management and administrative support. None of the milestones and achievements outlined in the previous sections could have been realized without this function. Some examples of the administrative milestones and achievements to date include the following:

Contract Development
With support from legal counsel, project staff developed legal agreements with each of the demonstration sites, the comparison site, and selected vendors. The site agreements outline the responsibilities of the department and the sites as they participate in the initiative.

Hiring of Site Coordinators
Each site determined its administrative support requirements, and volunteers in the communities led the hiring process with support from former regional health board and project staff. Each site advertised for and hired administrative support for their demonstration site.

Communication
Communication has played a key role in the initiative. An overall project plan for communicating with the public and stakeholders has been developed and carried out. The complete communication plan can be found in Appendix 9. Some of the highlights to date include:

- A press release and press conference announcing the four demonstration sites;
- The development of posters and brochures for distribution to patients/clients at each of the demonstration sites;



- The development and distribution of monthly Site News Bulletins;
- Radio and television interviews with project and site staff regarding nurse practitioners, primary care renewal, and the initiative in general;
- Articles in newsletters of various stakeholder groups such as the Medical Society of Nova Scotia and the Nova Scotia Pharmaceutical Society.

The demonstration sites have developed communication plans that link to the initiative's communication plan. Examples of communication activities at the site level include articles in local newspapers and community-specific flyers and brochures promoting the initiative. Copies of all print media coverage to date can be found in Appendix 10.

Groups such as the steering committee, working groups, project team, management team, site coordinators, and site societies/boards meet regularly to support, plan, coordinate, and make decisions related to the project. Site visits by members of the project staff have been found to be an invaluable means of communication between the sites and the project team. Site newsletters, quarterly reports and information systems progress reports are also important methods of sharing information.

Challenges

In the case of formal communication, it has been difficult to maintain an appropriate balance between the need to keep participants informed and the need for project and site staff to attend to competing project priorities. However, to date, the time that has been dedicated to communication has proven invaluable. In many cases it has resulted in issues being foreseen and resolved before they developed into major problems.

While the project team wants to respond to site issues and to maintain good relationships with staff at each site, primary care providers are busy doing what they do best, which is seeing patients/clients. Therefore, it is important to balance the need for providers to deliver primary care services with the need to build capacity for leading change within the communities.

Before site selection, the governing bodies of the proposed primary care organizations were responsible for the project in their community. However, when the sites were selected and staff was hired to coordinate the project, the governing body's direct participation in implementation decreased. This resulted in unclear identity, roles, and responsibilities for the governing bodies and demonstration site staff. These roles and relationships have been clarified.

The role of the site coordinator and governance volunteers, and the individuals in these positions, are key to the success of carrying out planned activities and meeting project timelines.

As with most health care system changes, key lessons learned are often transferable to other programs and jurisdictions. When the initiative is complete, the evaluation will have identified a number of key findings that will inform policy well into the future.

However, some lessons have already been learned from the planning and implementation of the initiative.

Magnitude of Change

There are many aspects to primary care renewal. However, it would be impossible to consider all of them within the scope of the Strengthening Primary Care Initiative. This initiative simultaneously introduces a new primary care provider, advanced information systems, and alternative payment mechanisms for primary care physicians in four unique communities in Nova Scotia. The change is enormous and it requires a high level of commitment and support from stakeholders, communities, providers and government.

In implementing changes in the delivery of primary care it is important to understand the capacity of health planners, communities, health care providers and recipients of care to change the way they plan service delivery, practice primary health care, or receive care. The amount of support required depends on the participants' degree of readiness to change.

Lesson #1: Many aspects of primary care renewal that are beyond the scope of this initiative should be considered in the future. One example is the role of other allied health providers in the delivery of primary health care.

Lesson #2: The magnitude of change that such an initiative requires of care providers, administrators, governing bodies and patients/clients should not be underestimated.

Lesson #3: Managing this type of change is critical. It requires ongoing planning and commitment by a wide range of champions, including communities, providers, stakeholders and government.

Lesson #4: Primary care organizations and their communities require support to build on existing strengths and increase their capacity to implement new ways of organizing, delivering, and funding primary care services.

Project Timelines

A six-month delay in announcing the initiative resulted in a similar delay in development and implementation. In Nova Scotia, it took one year to conduct consultations, establish the steering committee and working groups, clarify the initiative's goals and objectives, and select the four demonstration sites. Because of this, the sites will have been operational for approximately one year when the HTF project funding ends.

However, early in the planning process, stakeholders recognized that this timeline would limit the availability of meaningful information for the evaluation and for future decision-making. The Nova Scotia Department of Health's commitment to ensure that the demonstration sites operate for three complete years will allow for a more valuable evaluation.

When the sites were selected, it was anticipated that the communities and providers associated with them were ready to make changes in the way they planned and delivered primary care as stated in their proposals. This proved true in most cases. However, in retrospect, a longer transition period between pre-implementation and implementation would have benefited the initiative. This time would have been used to ensure that all participants understood the expectations and that the communities had adequate resources to support the proposed changes.

Phased-in or staggered implementation would have avoided the administrative challenges and frustration at the site level associated with concurrent implementation. However, given the time it took to plan and implement the initiative, a phased-in approach would have exceeded the available HTF timeframe.

Lesson #5: Three years is not enough time for a primary care demonstration project to be implemented and effectively evaluated.

Lesson #6: A longer transition period between pre-implementation and implementation would have benefited the demonstration sites.

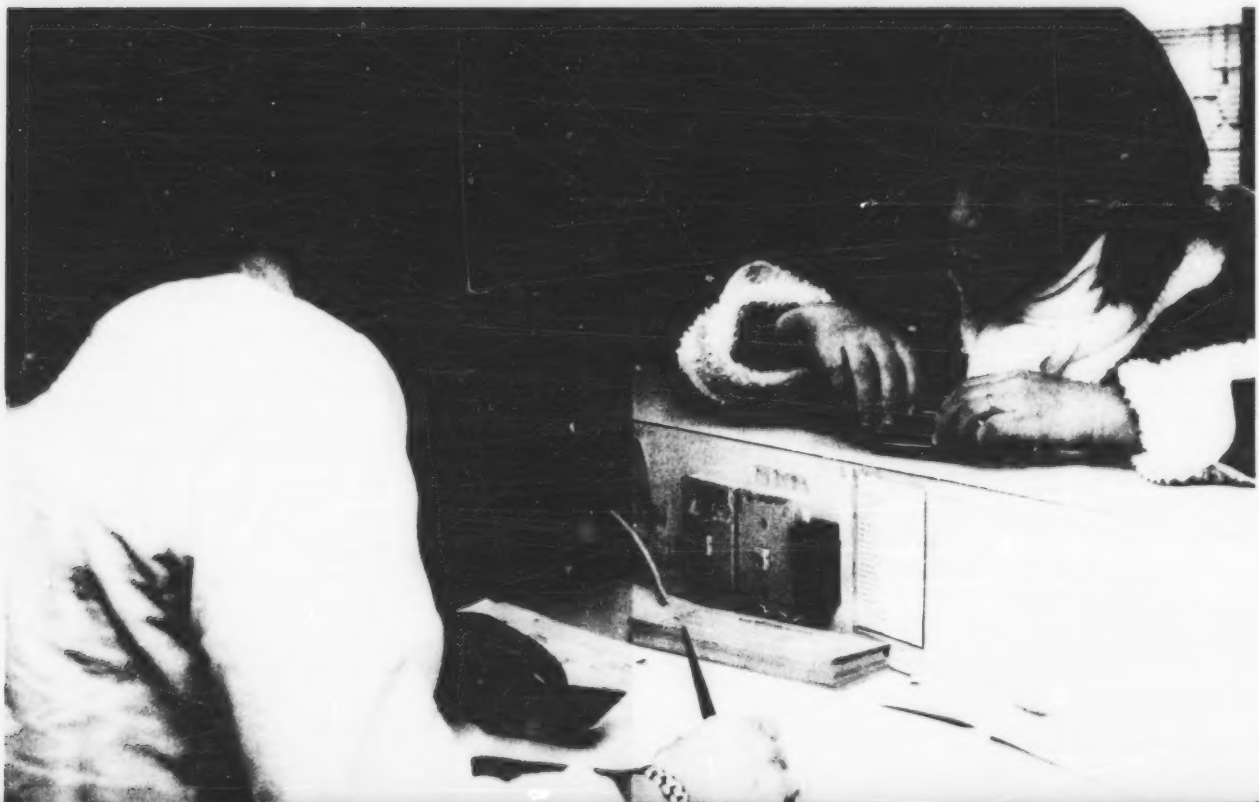
Lesson #7: **Changes to the way primary care is delivered should be made gradually, to allow providers to continue to provide care while changing the way they deliver that care.**

Lesson #8: **The implementation strategies (nurse practitioner in collaboration, information systems and alternative funding) would have been easier to implement if they had been phased-in.**

Consultation

Consultation generated exciting discussion about primary care renewal, and helped develop relationships between community representatives, stakeholders and the department. It also provided an opportunity for communicating the initiative's goals and objectives, allowed for further refinement of the implementation strategies, and gave communities time to gather momentum and support. However, consultation takes time.

Although it was intended that key stakeholder groups would participate in developing the initiative, it would have been impossible for each allied health profession to be represented on the steering committee and working groups. As a result, one individual was asked to bring the perspective of all allied health professions to the steering committee. In



retrospect, it would have been wise to directly include the Nova Scotia Pharmaceutical Society in planning.

Lesson #9: Consultation and stakeholder involvement, including the establishment of a provincial steering committee and working groups, was invaluable to the planning and implementation of the initiative.

Lesson #10: It is extremely important to include all relevant stakeholders in the planning and development phase.

Communication

Site and project staff spend much time and effort communicating on an ongoing basis. This communication keeps the parties aware and involved, enabling them to move forward and take action. It also builds understanding and trust, which are important in sustaining the relationship between the sites and the department. For the same reasons, it is important for the sites to communicate with their communities and for the department to communicate with all relevant stakeholders.

Lesson #11: Communication is key to supporting the demonstration sites and will be a critical success factor in supporting future primary care demonstration initiatives.

Lesson #12: The development and implementation of a comprehensive communication plan is a necessary support to a primary care demonstration initiative.

Leadership and Champions

Each community involved in the initiative has volunteer champions who are dedicated to their communities and to improving primary care services. The Department of Health and its stakeholder groups also have champions who believe that primary care is the foundation of a strong community-based health care system. The commitment of these champions to improving primary care ensures that work continues toward meeting the initiative's goals and objectives.

Leadership for the initiative at the community level came, for the most part, from governing bodies of local primary care organizations. While the physicians may have been supportive of the general intent of the initiative, not all were directly involved in proposal development at the community level. As a result, some did not have a clear understanding of their role in the demonstration sites and the impact the project would have on the practice of their profession.

Lesson #13: Leaders and champions at all levels are critical to the success of primary care renewal initiatives.

Lesson #14: Those primary care physicians who will be involved in piloting new primary care service delivery models must actively participate in the planning and development of proposals at the community level.

Nurse Practitioners and Collaboration

There are advantages and disadvantages associated with being the first in Nova Scotia to introduce nurse practitioners in collaborative practice with physicians in the primary care setting. The advantage is that everything that is learned from this experience will shape future nurse practitioner legislation and policy in Nova Scotia. The disadvantage is operating without legislated authority and the resulting operational issues that emerge. Even though the nurse practitioners have been practising at the sites for less than a year, the initiative has already learned lessons that may be applied to future legislation governing nurse practitioners.

Lesson #15: The establishment of a working group to plan the introduction of the nurse practitioner in the primary care setting may have allowed for the proactive identification and resolution of some of the resulting operational issues.

Lesson #16: A high degree of commitment at the department, stakeholder, and demonstration site level, is required to successfully introduce a new provider to the primary care setting.

Lesson #17: Given the rapid changes in drug development and the resulting need to quickly reflect such changes in those drugs nurse practitioners can prescribe, a responsive mechanism for amending the Pharmacy Act Regulations must be developed.

Lesson #18: Lessons learned from the recruitment and retention of other health professionals to rural areas should be applied to the recruitment and retention of nurse practitioners, once they are introduced on a broader scale throughout the primary care system in Nova Scotia.

Information Systems

The introduction of advanced information systems in the demonstration sites affects all aspects of the delivery of primary care services by providers, and the provision of support by site administrative staff. While the systems are still in the early stages of use by providers and staff at the four demonstration sites, a number of lessons related to planning and implementation have been learned.

Lesson #19: Planning for the implementation of advanced information systems in primary care must take into account the ongoing delivery of patient/client care.

Lesson #20: It is critical to include system users in the vendor selection decision.

Lesson #21: Implementation and maintenance of a primary care information system requires solid infrastructure at the site, district health authority and department levels.

Lesson #22: User acceptance and use of a new information system depends on their level of preparedness to change, recognition of the benefits of such a system, and the ability to set reasonable goals related to system use.

Lesson #23: Education, training and support for hardware and software requires a supporting infrastructure and must be adequately resourced.

Alternative Funding

The initiative intended to explore alternative funding for primary care organizations. However, none of the demonstration sites chose to adopt an alternative funding mechanism. As a result, the initiative addressed only the alternative payment of physicians.

Lesson #24: Additional information and education for communities and providers about alternative funding methods may have resulted in some sites choosing a new funding method for their primary care organizations.

Lesson #25: In order to support alternative funding methods, such as block funding or population-based funding, the Primary Care section and other relevant sections of the Department of Health must work closely together to plan and implement these changes.

Evaluation

Although the evaluation will not be complete until after December 2002, lessons related to planning and implementing the evaluation have already been identified. More comprehensive lessons learned will be identified when the initiative and the evaluation are complete.

Lesson #26: The Evaluation Working Group, made up of representatives of the demonstration sites, stakeholder groups and academics with expertise in research and evaluation, has enriched the evaluation of the initiative and provided a valuable advisory and decision-making role.

Lesson #27: Clearly defined program goals and objectives, from which the evaluation flows, are critical. These goals and objectives must be prioritized so that the evaluation resources can be tailored to the identified priorities.

Lesson #28: With the move to electronic patient records, it is important to ensure that an individual's personal health information is protected yet aggregate health information is readily available for evidence-based decision-making.

Communication and Dissemination Plan

STRENGTHENING
PRIMARY**Care**
IN NOVA SCOTIA COMMUNITIES

A formal communication plan for the initiative has been developed and implemented. The goal of the communication plan is to create widespread awareness, understanding and acceptance of this initiative within the general public and its many stakeholder communities, while meeting the communication requirements of the Health Transition Fund.

The objectives of the communication plan are:

- To inform and educate the public about the initiative, its goals and what should be expected from the project;
- To clearly, effectively and positively communicate the ongoing status, lessons learned and evaluation results of the initiative to its identified interest groups;

- To maintain an ongoing and effective communication linkage among the demonstration sites and the Nova Scotia Department of Health during the initiative;
- To provide communication tools to the four demonstration sites to help them inform their communities about the initiative.

The communications plan includes a description of the target audience(s), key messages, communication strategies and anticipated dates for implementation for each of the objectives.

A press release is planned one month after submission of this report to HTF. Subsequent to this, the report will be made available to stakeholders and posted on the initiative's Web site. An information bulletin, which will highlight achievements and lessons learned to date, will also be developed and distributed to target audiences.

The initiative will be complete on December 31, 2002 and the final evaluation report is expected to be complete by March 31, 2003. This report will subsequently be shared with HTF (or its successor organization) and distributed to provincial and national stakeholders. A press release and press conference highlighting the final evaluation results will be held at this time, and components of the evaluation will be reported in scientific journals and conferences. Evaluation results will also be posted on the initiative's Web site.

STRENGTHENING
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Being among the first to try new ways of managing, delivering, and funding primary care in Canada is exciting and challenging. The Strengthening Primary Care Initiative is only in its early operational days, but to date, the people involved in the initiative have experienced great achievements.

- Nurse practitioners have been introduced as new providers in the primary care setting. The collaborative practices between the nurse practitioners and physicians at the sites are well established in each of the four communities.

- The demonstration sites have adopted and are using advanced information systems that include an electronic patient record and a practice management system that are new to providers and staff.

- A comprehensive evaluation framework, which defines the project's goals in measurable terms, has been developed and requested by and shared with many other provinces.

However, much has yet to happen. Over the next two years, nurse practitioners, physicians, and other care providers will work together to develop and refine the innovative way in which they are delivering primary care services. The information systems will gradually be adopted and embraced by providers and staff, and it will strengthen and support the care that is delivered.

Lessons learned to date have already informed policy at the Department of Health. This will continue throughout the duration of the initiative, as site staff and providers, community champions, the Department of Health, and other stakeholders continue to work together to forge new ground in the attempt to identify new and exciting ways to improve primary care service delivery in Nova Scotia.

STRENGTHENING
PRIMARY**care**
IN NOVA SCOTIA COMMUNITIES

1.0 To improve patient/client centered primary care
The individual, family and community should be central to primary care

1.1 Individuals maintain the right to choose their principal primary care providers.

1.2 Individuals, families and providers are supported in making informed decisions.

1.3 Care is coordinated and integrated to ensure seamless access for the individual and family in the optimal setting.

1.4 Care and service are based on the individual's and family's health care needs.

1.5 Ongoing and respectful relationships among individuals, families and providers are fostered.

1.6 Individuals and families receive quality care from competent, responsible, providers in a timely manner.

2.0 To improve responsiveness of primary care organizations/ groups to community needs

Primary care organizations/groups should be responsible for ensuring they are in touch with and responsive to their communities.

2.1 Communities are encouraged to participate in partnership with the primary care organizations/groups and with others in finding solutions and ways of re-designing the delivery of primary care services.

2.2 Primary care organization/group governance and/or advisory structures involve community representation.

2.3 Primary care organizations/groups understand their various communities (including city/town/village distribution, people with special needs resulting from physical, mental, cultural, socio-economic or other factors), and are responsive to clearly defined community health needs.

2.4 Primary care organizations/groups develop partnerships with under-serviced groups within the population (including cultural and minority groups) to implement strategies to meet their primary care needs.

2.5 The scope of services will take into account local population requirements, geographic location, and the availability of other services and resources.

3.0 To improve access to comprehensive primary care services

Comprehensive primary care services should be available to all Nova Scotians.

3.1 Everyone served by the primary care organization/group has access to an interdisciplinary team including a family physician and a nurse practitioner practicing collaboratively.

3.2 Primary care organizations/groups provide or arrange for 24-hour urgent care.

3.3 Primary care organizations/groups enhance access for those who face barriers in the current system, including minority and cultural groups, mentally ill, the chronically disabled and the poor.

4.0 To increase emphasis on heath promotion and Illness prevention

Primary care organizations/groups should promote health and prevent illness through education, services and advocacy.

4.1 There is an increased focus of primary care organization/group programs and services on health promotion through individual and group activities.

4.2 Primary care organizations/groups are effectively linked with other groups and organizations engaged in health promotion and illness prevention.

4.3 Primary care organizations/groups recognize and increase individuals'/families'/and communities' capacity for self-care and healthy living.

5.0 To improve Collaboration

Primary care providers should work collaboratively with patient/clients, each other, and with other health professionals and programs throughout Nova Scotia.

5.1 Primary care services are provided by an interdisciplinary team that must include a family physician and nurse practitioner who practice collaboratively as principal primary care providers for individuals and families. The team may be enhanced by the inclusion of other health professionals.

5.2 Primary care organizations/groups promote a climate of respect, trust and support for shared decision-making.

5.3 Decisions regarding the most appropriate provider to deliver a certain service are made within the context of patient preference, provider competence and other considerations.

5.4 The interdisciplinary team respects the clinical autonomy of health professionals to make decisions based on best evidence and the individual's and the family's wishes.

6.0 To improve accountability

Primary Care services should be provided within a framework that defines specific areas of responsibility and accountability for patients/clients, families and communities, providers, primary care organizations, community and regional health boards, and the Nova Scotia Department of Health. These accountabilities should be jointly developed and supported by appropriate infrastructures.

Note: It is recognized that within the various accountability relationships in the primary care system, there are a number of specific areas of accountability that are beyond the scope of the Strengthening Primary Care Project to influence and/or evaluate. These objectives include only those which can be influenced by the demonstration project sites or evaluated within the evaluation framework of the project.

Accountability between the primary care organization/group and patients/ clients, families and communities.

6.1 Primary care organizations/groups ensure ongoing provision of care focused on community identified needs, and clearly identified standards.

6.2 The patient/client, family and community participate in planning and evaluation of the provision of primary care services.

6.3 Primary care organizations/groups provide effective communication so that community members understand their primary care organization.

6.4 The patient/client and family select and maintain an ongoing relationship with a family physician and nurse practitioner as principal primary care providers, and with the rest of the primary care organization.

6.5 Primary care organizations will ensure that information used in planning or for public discussion protects the privacy, security and confidentiality of patients/clients and families.

Accountability of the primary care providers to each other.

6.6 Primary care organizations and providers support each other in delivering high quality service through professional development, healthy working conditions and quality work life.

6.7 Primary care providers practice collaboratively showing mutual respect and trust.

Accountability between the Nova Scotia Department of Health and the primary care organization/group.

6.8 The Nova Scotia Department of Health develops and supports an evaluation framework for the primary care demonstration project.

6.9 The Nova Scotia Department of Health approves the projects for funding under the Strengthening Primary Care initiative.

6.10 The Department of Health and the primary care organization/group work together to develop flexible funding mechanisms that enhance fiscal predictability.

6.11 Primary care organizations/groups provide high quality health information and data to support decision making and evaluation.

Accountability between the Department of Health and patients/clients, families and communities.

6.12 The Department of Health sets standards for information privacy, security and confidentiality, for use by the primary care organization/group for the protection of the public.

6.13 The Department of Health ensures the regulatory bodies of the medical and nursing professions develop a process whereby they jointly approve the guidelines for nurse practitioners in collaborative practice in primary care demonstration project sites.

6.14 The patient/client, family and community participate in planning and evaluation of the primary care demonstration project site.